

Due Date none

OSMM&N File No. 278426US0PCT

By NFO/lit/FF

Serial No. 10/549,294

In the matter of the Application of Mitsugu ABE, et al.

For MATERIAL FOR PURIFICATION OF SEMICONDUCTOR POLISHING
SLURRY, MODULE FOR PURIFICATION OF SEMICONDUCTOR
POLISHING SLURRY AND PROCESS FOR PRODUCING SEMICONDUCTOR
POLISHING SLURRY

The following has been received in the U.S. Patent Office on the date stamped hereon:

- ☒ Preliminary Amendment
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- ☒ Credit Card Payment Form for \$400.00

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Linked to OPTMS	
<u>10.26.05</u>	
DATE	CASE ID

DOCKET NO: 278426US0PCT

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

IN RE APPLICATION OF :
MITSUGU ABE, ET AL. : ATTN: APPLICATION DIVISION
SERIAL NO: 10/549,294 :
FILED: SEPTEMBER 16, 2005 :
FOR: MATERIAL FOR PURIFICATION :
OF SEMICONDUCTOR POLISHING :
SLURRY, MODULE FOR :
PURIFICATION OF :
SEMICONDUCTOR POLISHING :
SLURRY AND PROCESS FOR :
PRODUCING SEMICONDUCTOR :
POLISHING SLURRY :

PRELIMINARY AMENDMENT

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Prior to examination on the merits, please amend the above-identified application as follows:

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Discussion of the amendments begin on page 9 of this paper.

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-14 (Canceled).

Claim 15 (New): A material for purification of a semiconductor polishing slurry which is used to remove metals present in semiconductor polishing slurry, comprising:

- a functional group capable of forming a metal chelate;
- a fibrous substrate of which at least the surface is fixed onto by the functional group.

Claim 16 (New): A material for purification of a semiconductor polishing slurry which is used to remove metals present in the semiconductor polishing slurry, comprising:

- a functional group capable of ion-exchanging with a hydroxyl group or capable of forming a metal chelate;
- a fibrous substrate of which at least the surface is fixed onto by the functional group.

Claim 17 (New): A material for purification of a semiconductor polishing slurry according to claim 16, wherein the hydroxyl group is an ethylenical hydroxyl group and fixed onto the surface of the fibrous substrate in hydroxyl group value of 40 mgKOH/g or more.

Claim 18 (New): A material for purification of a semiconductor polishing slurry according to claim 15, wherein the fibrous substrate is at least one selected from a plant-based natural fiber, an animal-based natural fiber, a cellulose-based regenerated fiber and a polyvinyl alcohol-based synthetic polymer fiber.

Claim 19 (New): A material for purification of a semiconductor polishing slurry according to claim 16, wherein the fibrous substrate is at least one selected from a plant-based natural fiber, an animal-based natural fiber, a cellulose-based regenerated fiber and a polyvinyl alcohol-based synthetic polymer fiber.

Claim 20 (New): A material for purification of a semiconductor polishing slurry according to claim 17, wherein the fibrous substrate is at least one selected from a plant-based natural fiber, an animal-based natural fiber, a cellulose-based regenerated fiber and a polyvinyl alcohol-based synthetic polymer fiber.

Claim 21 (New): A material for purification of a semiconductor polishing slurry according to claim 15, which is used to remove metals present in the semiconductor polishing slurry, wherein the functional group capable of forming a metal chelate is at least one group selected from a group containing aminocarboxylic acids, a group containing phosphoric acids, a group containing thio compounds and a group with at least a part of acid type functional groups of these groups determined as alkali metal salt or ammonium salt.

Claim 22 (New): A material for purification of a semiconductor polishing slurry according to claim 16, which is used to remove metals present in the semiconductor polishing slurry, wherein the functional group capable of forming a metal chelate is at least one group selected from a group containing aminocarboxylic acids, a group containing phosphoric acids, a group containing thio compounds and a group with at least a part of acid type functional groups of these groups determined as alkali metal salt or ammonium salt.

Claim 23 (New): A material for purification of a semiconductor polishing slurry according to claim 17, which is used to remove metals present in the semiconductor polishing slurry, wherein the functional group capable of forming a metal chelate is at least one group selected from a group containing aminocarboxylic acids, a group containing phosphoric acids, a group containing thio compounds and a group with at least a part of acid type functional groups of these groups determined as alkali metal salt or ammonium salt.

Claim 24 (New): A material for purification of a semiconductor polishing slurry according to claim 18, which is used to remove metals present in the semiconductor polishing slurry, wherein the functional group capable of forming a metal chelate is at least one group selected from a group containing aminocarboxylic acids, a group containing phosphoric acids, a group containing thio compounds and a group with at least a part of acid type functional groups of these groups determined as alkali metal salt or ammonium salt.

Claim 25 (New): A material for purification of a semiconductor polishing slurry according to claim 19, which is used to remove metals present in the semiconductor polishing slurry, wherein the functional group capable of forming a metal chelate is at least one group selected from a group containing aminocarboxylic acids, a group containing phosphoric acids, a group containing thio compounds and a group with at least a part of acid type functional groups of these groups determined as alkali metal salt or ammonium salt.

Claim 26 (New): A material for purification of a semiconductor polishing slurry according to claim 20, which is used to remove metals present in the semiconductor polishing slurry, wherein the functional group capable of forming a metal chelate is at least one group selected from a group containing aminocarboxylic acids, a group containing phosphoric

acids, a group containing thio compounds and a group with at least a part of acid type functional groups of these groups determined as alkali metal salt or ammonium salt.

Claim 27 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 15, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 28 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 16, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 29 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 17, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 30 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 18, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 31 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to

claim 19, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 32 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 20, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 33 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 21, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 34 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 22, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 35 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 23, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 36 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to

claim 24, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 37 (New): A material for purification of a semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 25, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 38 (New): A material for purification of semiconductor polishing slurry, which is used to remove metals present in the semiconductor polishing slurry according to claim 26, wherein the functional group capable of forming a metal chelate is a group containing amines or hydroxylamines.

Claim 39 (New): A material for purification of a semiconductor polishing slurry used to remove metals present in the semiconductor polishing slurry, wherein two or more of the materials for purification of the semiconductor polishing slurry having a different substrate and/or functional group among the materials for purification of a semiconductor polishing slurry according to claim 16 are laminated to form a layer or mixed.

Claim 40 (New): A material for purification of a semiconductor polishing slurry used to remove metals present in the semiconductor polishing slurry, wherein the material for purification of a semiconductor polishing slurry according to claim 16 is formed into a self-supportable sheet or felt.

Claim 41 (New): A module for purification of a semiconductor polishing slurry, wherein the material for purification of a semiconductor polishing slurry according to claim 16 is charged in a container provided with an inflow port and an outflow port for the polishing slurry so as to allow the polishing slurry to flow through it.

Claim 42 (New): A module for purification of a semiconductor polishing slurry, wherein the material for purification of a polishing slurry according to claim 16 is disposed in a flowable state within an area partitioned by a filter or a strainer through which the polishing slurry flows in a container provided with an inflow port and an outflow port for the semiconductor polishing slurry.

DISCUSSION OF THE AMENDMENTS

Claims 1-14 are canceled.

Claims 15-42 are new.

Upon entry of the amendment Claims 15-42 will be active.

New Claims 15-17 are supported by original Claims 1-3.

New Claims 18-20 are supported by original Claim 4.

New Claims 21-26 are supported by original Claim 5.

New Claims 27-38 are supported by original Claim 6.

New Claim 39 is supported by original Claim 7.

New Claim 40 is supported by original Claim 8.

New Claim 41 is supported by original Claim 9.

New Claim 42 is supported by original Claim 10.

No new matter has been added by the amendments.

Respectfully submitted,

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